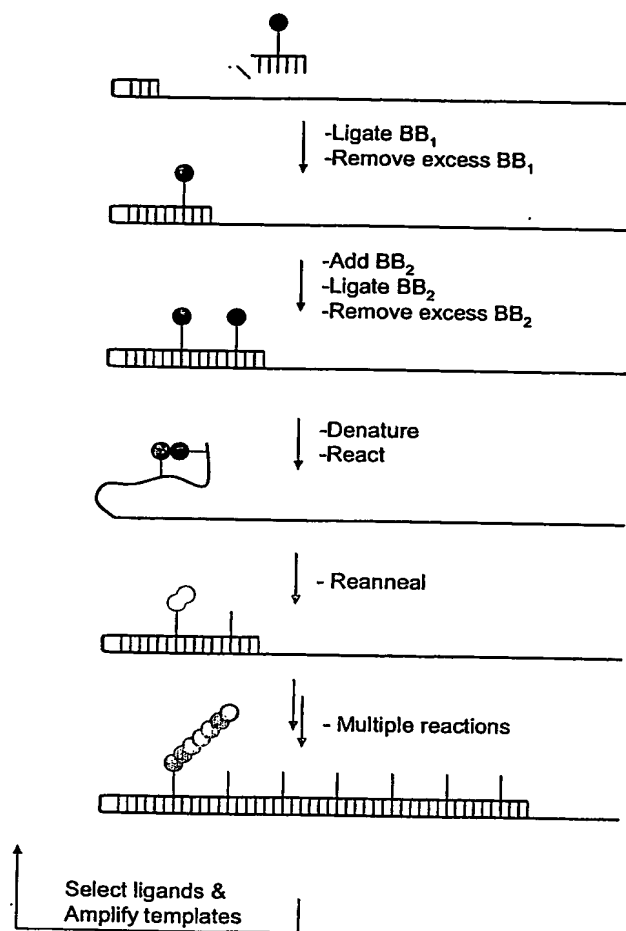


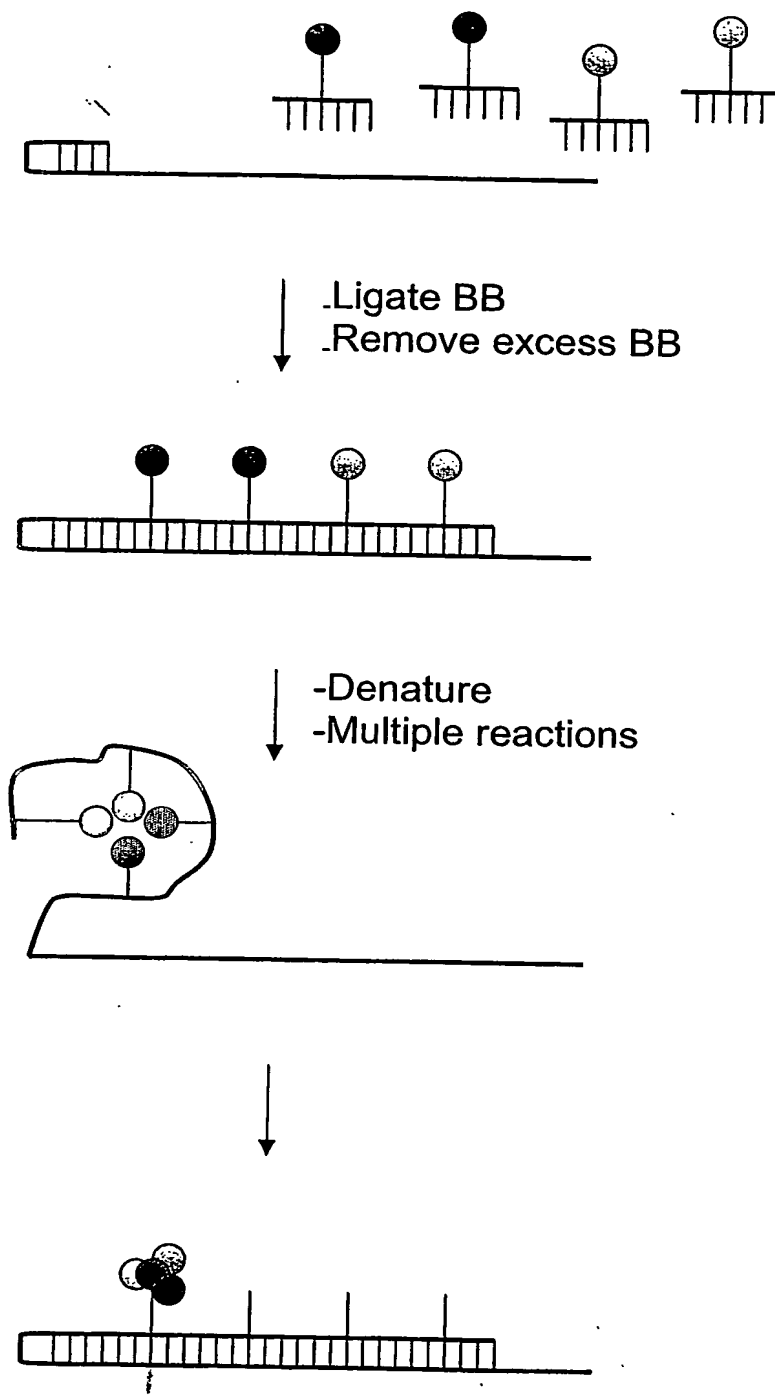
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Fig. 1

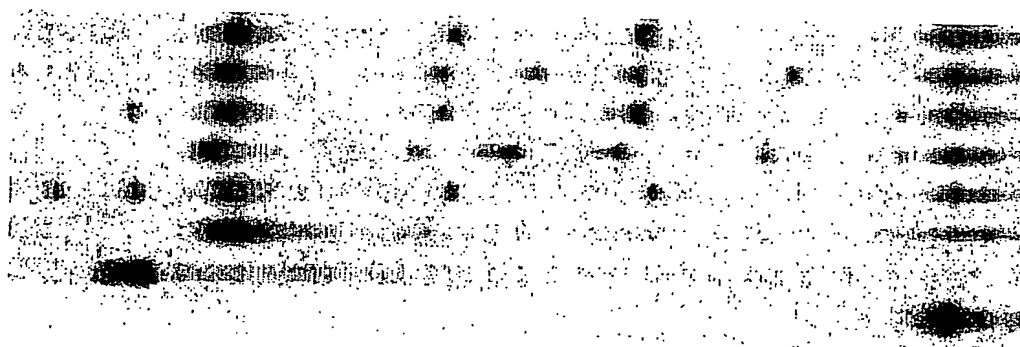
Synthesis of a linear molecule

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Fig.2



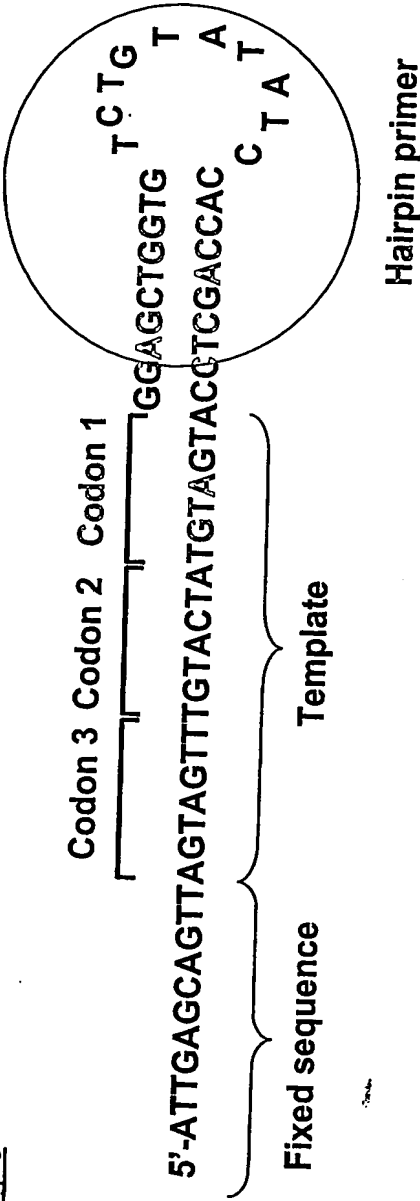
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Lane 1 2 3 4 5 6 7 8

Fig. 4

Fig. 5



Building block 7-mer oligonucleotides

- BB 1: pTACXACA complementary to codon 1
- BB 2: pTACXACA complementary to codon 2
- BB 3: pAACXACT complementary to codon 3

X = Carboxy dT
p = Phosphate

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Fig. 6

Codon 4 Codon 3 Codon 2 Codon 1
 5' AGCAGTTTGTAGTAACTTTGTAGTACCTCGACCAC TTT GGAGCTGGTG TTT

Anticodon-building block 7-mers

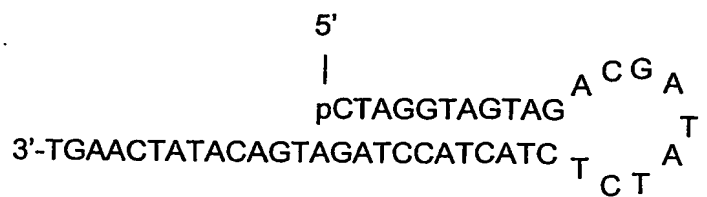
Anticodon-building block subtype 1: pTNNXNNA

Anticodon-building block subtype 2: pANNXNNT

X = Carboxy dT with attached building block

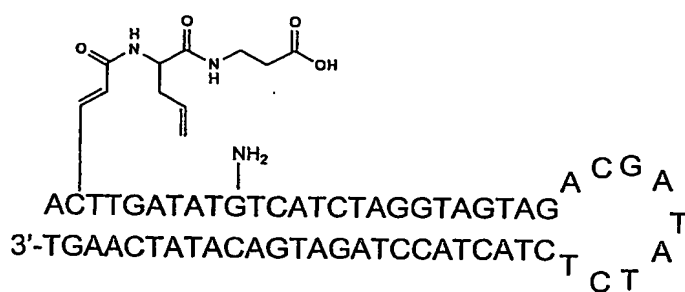
Fig.7

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Template-primer hairpin

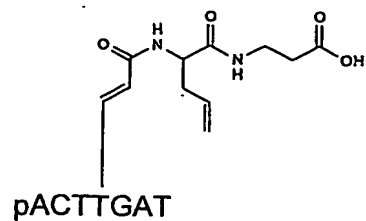
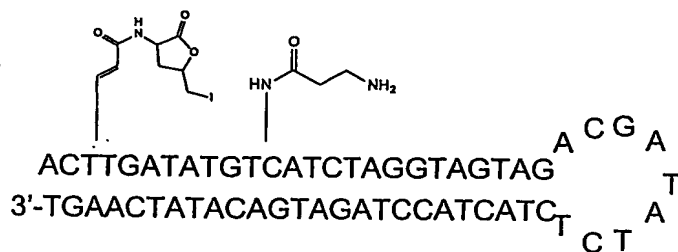
Ligate oligo A & B



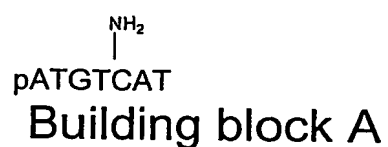
Denature

X-link

Cleave linker

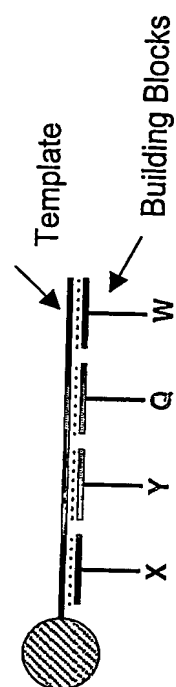


Building block B

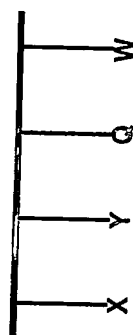


Building block A

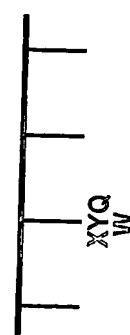
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Ligate anti-codons
Separate template and
Building blocks



React chemical entities



 = Solid support

Fig. 8

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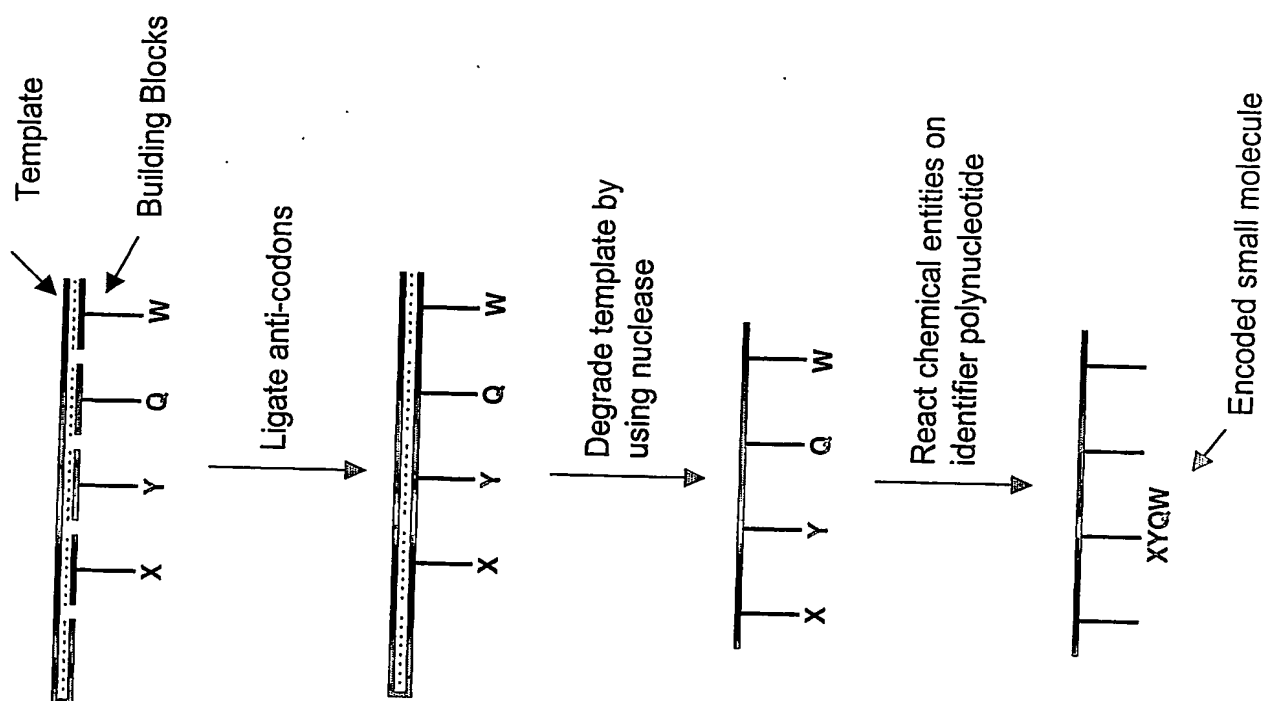
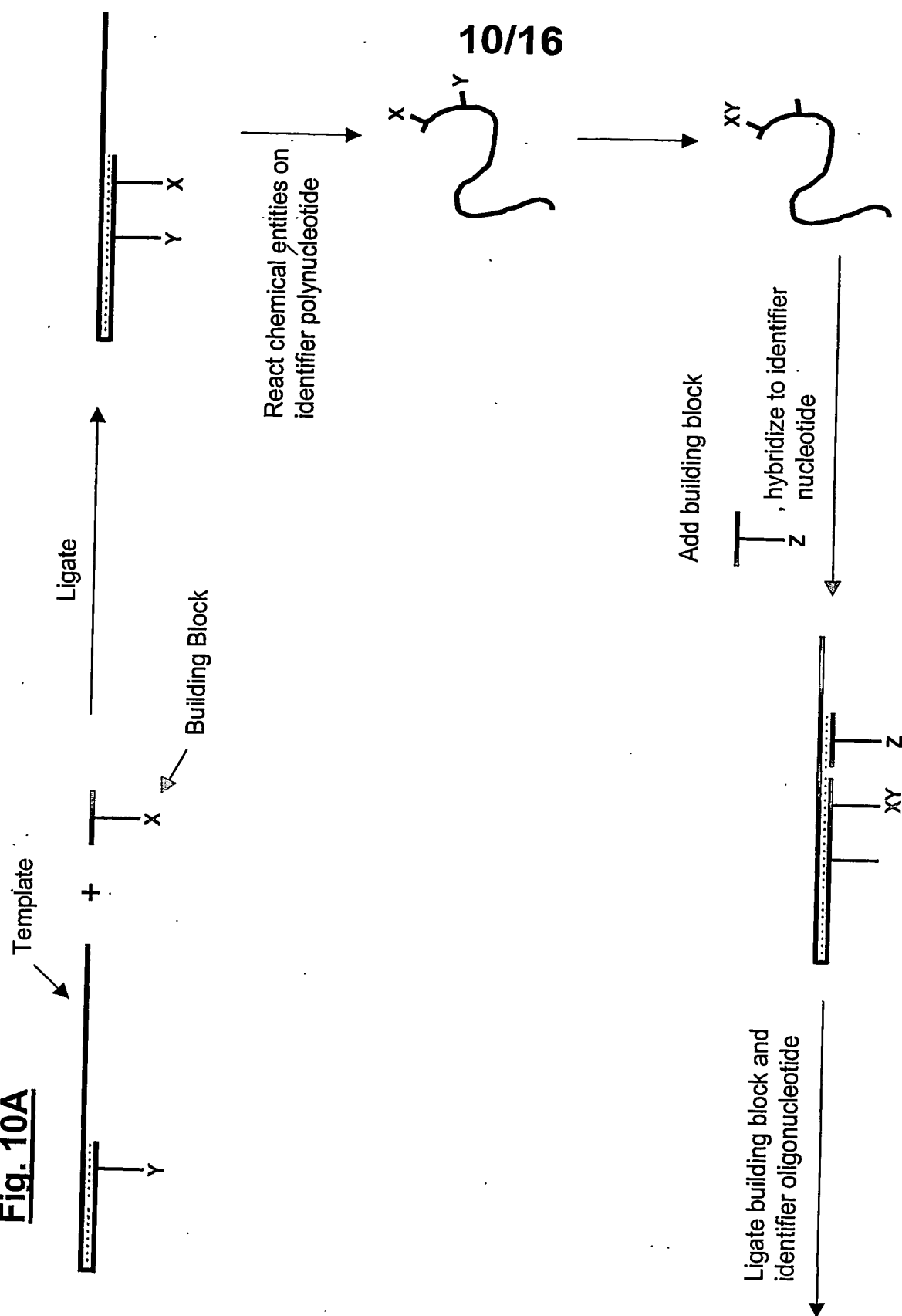
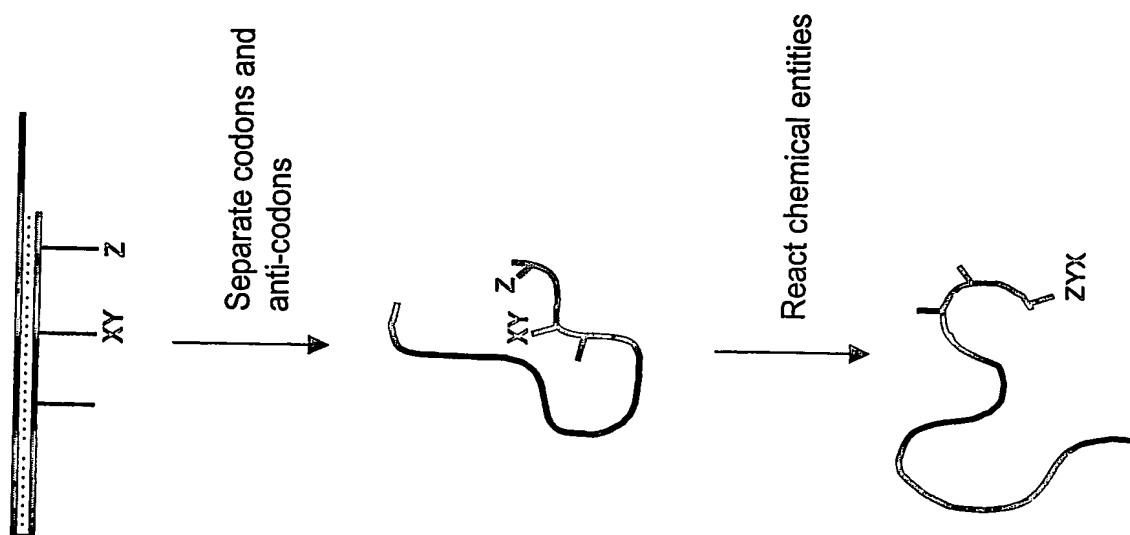
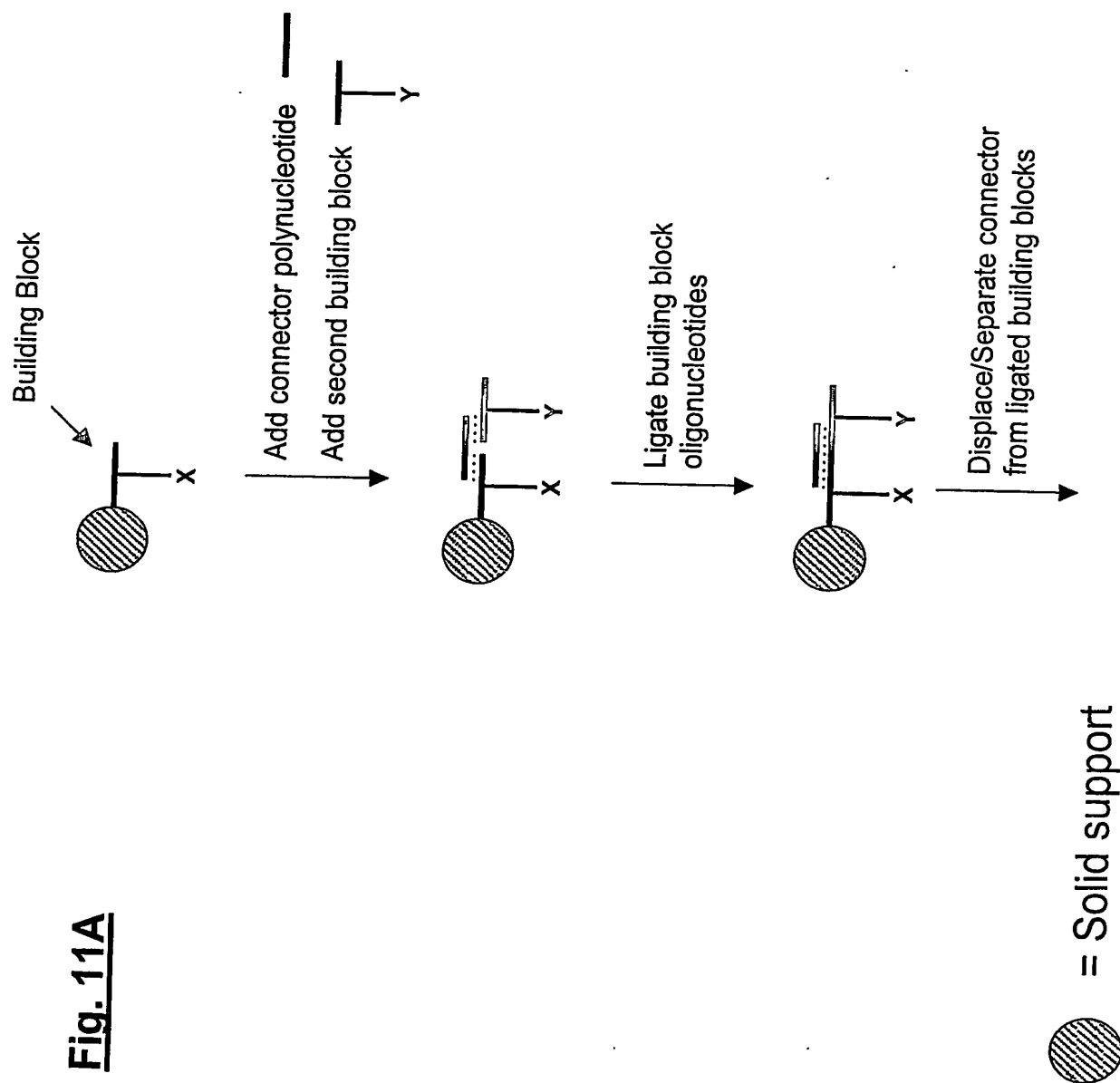
**Fig. 9**

Fig. 10A

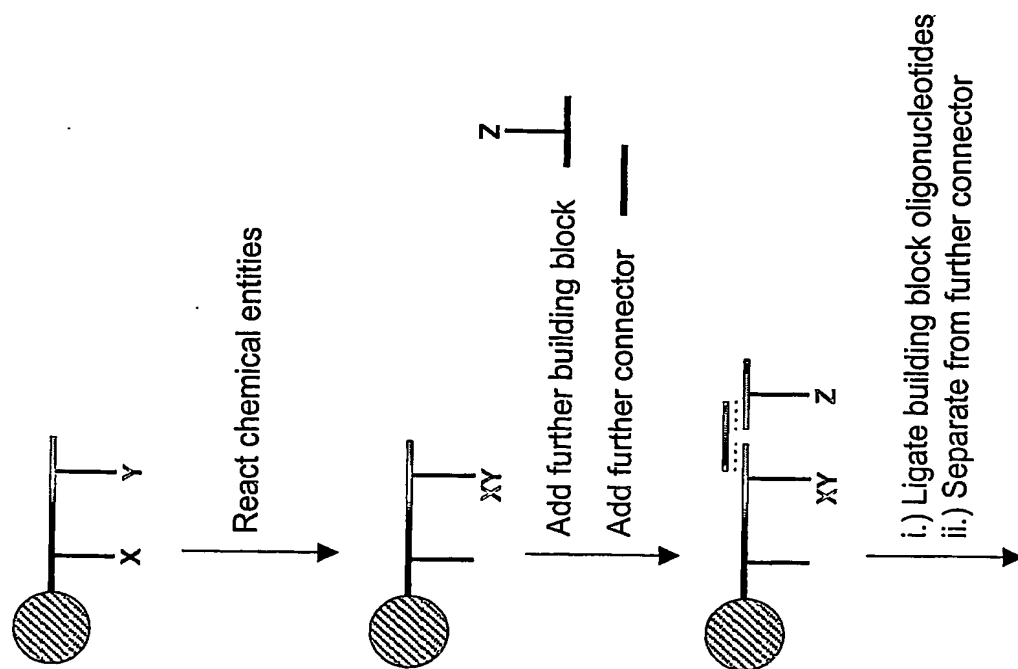
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**Fig. 10B**

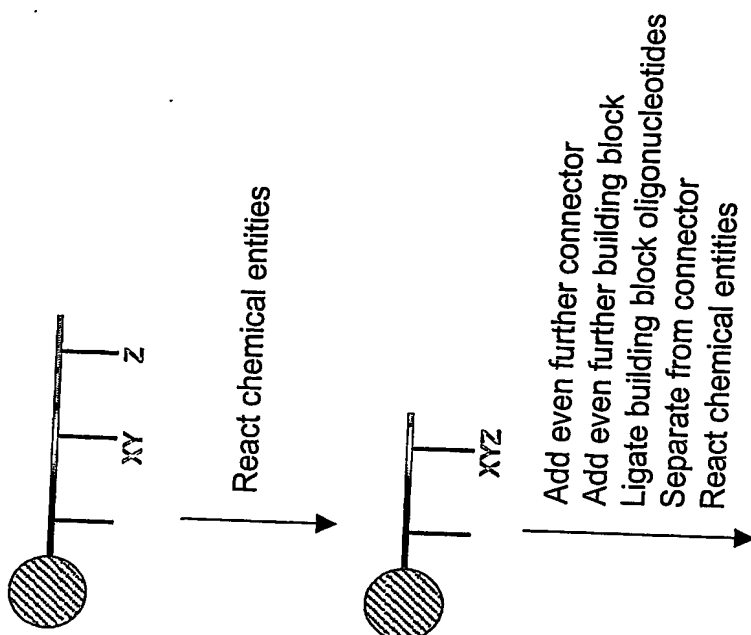
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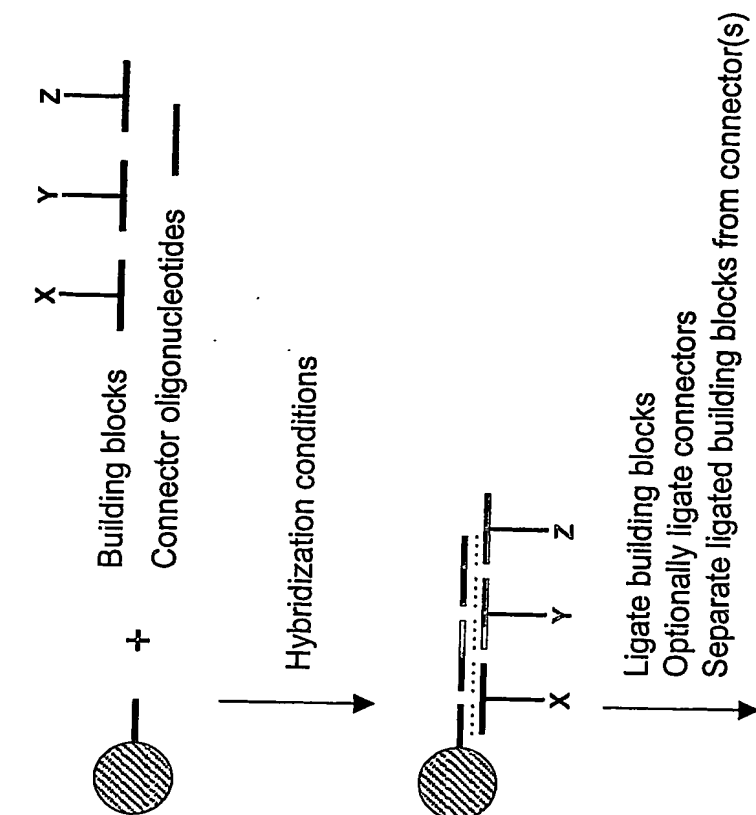
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**Fig. 11B** = Solid support

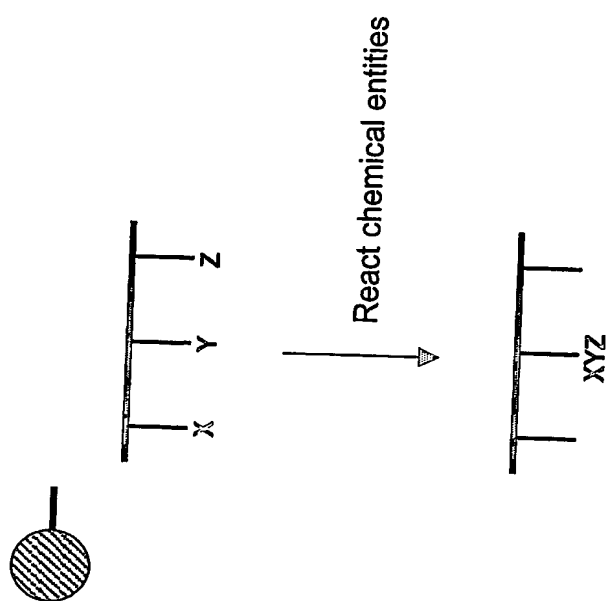
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Fig. 11C = Solid support

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 = Solid support

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**Fig. 12B**

= Solid support